Amendments to the claims:

- a. placing a graphite mandrel in an electro deposit chamber as the cathode material;
- b. placing rhenium stock in the electro deposit chamber as the anode material; $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$
- c. filling the electro deposit chamber with chloride electrolyte;
- d. closing the electro deposit chamber;
- e. heating the electrolyte bath to a desired temperature;
- f. depositing rhenium on the mandrel to a desired thickness by applying current and voltage across the anode and cathode;
- $\ensuremath{\mathbf{g}}.$ machining the rhenium on the mandrel to a final desired close tolerance dimension;
- h. placing niobium alloy stock $\underline{\text{containing zirconium}}$ in the electro deposit chamber as the anode;
- i. heating the electrolyte bath to a desired temperature;
- j. depositing niobium alloy over the rhenium to a desired thickness by applying current and voltage across the anode and cathode while creating an atomic level bonded interface;
- k. removing the mandrel from the electro deposit chamber and grinding the formed $\underline{\text{clad}}$ tube $\underline{\text{for nuclear fuel}}$ to a desired outer diameter; and
- 1. removing the formed tube from the mandrel.
- 2.(currently amended): The [process] $\underline{\operatorname{clad}}$ tube of claim 1, wherein the electrolyte bath is heated to a temperature less than eight hundred degrees centigrade.
- 3.(currently amended): The [process] <u>clad tube</u> of claim 1, wherein the mandrel is lowered into the electrolyte bath below the level

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of the rhenium deposited on the mandrel prior to the step of depositing niobium alloy over the rhenium.